STATIONARY SOURCE PERMIT TO OPERATE
This permit includes designated equipment subject to
National Emission Standards for Hazardous Air Pollutants MACT KK as an area source.

This permit supersedes your State Operating Permit dated May 4, 2006.

In compliance with the Federal Clean Air Act and the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution,

Roslyn Converters, Inc.
1106 West Roslyn Road
Colonial Heights, VA 23834
Registration No.: 50833

is authorized to operate

a Printing Facility

located at

1106 West Roslyn Road

in accordance with the Conditions of this permit.

Approved on August DRAFT, 2006.

Director, Department of Environmental Quality

Permit consists of 9 pages.
Permit Conditions 1 to 39.
Source Testing Report Format
Attachment A

INTRODUCTION

This permit approval is based on the permit application dated December 19, 2005, including amendment information dated February 3, 2006, June 5, 2006, August 3, 2006 and supplemental information dated March 3, 2006, March 13, 2006 and July 12, 2006. Any changes in the permit application specifications or any existing facilities which alter the impact of the facility on air quality may require a permit. Failure to obtain such a permit prior to construction may result in enforcement action.

Words or terms used in this permit shall have meanings as provided in 9 VAC 5-10-10 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. The regulatory reference or authority for each condition is listed in parentheses () after each condition.

Annual requirements to fulfill legal obligations to maintain current stationary source emissions data will necessitate a prompt response by the permittee to requests by the DEQ or the Board for information to include, as appropriate: process and production data; changes in control equipment; and operating schedules. Such requests for information from the DEQ will either be in writing or by personal contact.

The availability of information submitted to the DEQ or the Board will be governed by applicable provisions of the Freedom of Information Act, §§ 2.2-3700 through 2.2-3714 of the Code of Virginia, § 10.1-1314 (addressing information provided to the Board) of the Code of Virginia, and 9 VAC 5-170-60 of the State Air Pollution Control Board Regulations. Information provided to federal officials is subject to appropriate federal law and regulations governing confidentiality of such information.

PROCESS REQUIREMENTS

1. **Equipment List** - Equipment to be operated at this facility consists of:

   - one 8-Color Station Rotogravure Printing Press (ref. no. P10 – previously P1) with a web width of 40 inches
     (Used for cigarette tipping paper) rated at 2,000 ft/min and 545.10 lbs of VOCs/hr (NESHAPS);

   - one 2-Color Station Rotogravure Printing Press (ref. no. P9 – previously P2) with a web width of 48 inches
     (Used for cigarette tipping paper) rated at 2,000 ft/min and 490.7 lbs of VOCs/hr (NESHAPS);

   - one 6-Color Station Rotogravure Printing Press (ref. no. P11 – previously P3) with a web width of 48 inches
     (Used for cigarette tipping paper) rated at 2,000 ft/min and 561.6 lbs of VOCs/hr (NESHAPS);

- Two (2) parallel Smith Engineering Regenerative Thermal Oxidizers each rated at 50,000 SCFM with eight 6.5 mmbtu/hr natural gas burners (Total maximum rated capacity: 52.0 mmbtu/hr). The parallel thermal oxidizers share a common stack and control emissions from the six (6) station color press, the eight (8) station color press, the two (2) station color paper coater and the press parts washer;
- one Renzmann Type Roto II Distillation Unit and Parts Washer Type 300 size 22 (ref. no. PW1);
- one 8330 gallon Capital Iron Works unpainted Variable Space Solvent Storage Tank (ref. no. T1);
- one 8330 gallon Capital Iron Works unpainted Variable Space Solvent Storage Tank (ref. no. T2);
- one Natural Gas Fired Fulton Fluid Heater (ref. no. H1) rated at 6.0 mmbtu/hr (input);
- one Natural Gas Fired Fulton Fluid Heater (ref. no. H2) rated at 6.0 mmbtu/hr (input);
- twenty four Natural Gas Fired Modine Space Heaters (ceiling mounted) (ref. no. HC1-24) each rated at 0.05 mmbtu/hr (input);
- one Laser Perforator (ref. no. LP)
- one Electrostatic Perforator (ref. no. EP1)
- one Paper Trimming Collection System (ref. no. BG)

2. **Emission Controls and Control Efficiency** - Volatile organic compound (VOC) emissions from the (P10) eight (8) station Rotomec rotogravure printing press, the (P9) two (2) station rotogravure paper coater, the (P11) six (6) station Rotomec rotogravure printing press and the (PW1) distillation and parts press washer shall be controlled by a total enclosure and a regenerative thermal oxidizer (RTO) with a destruction efficiency of 97.9 percent. The regenerative thermal oxidizer shall be provided with adequate access for inspection.
(9 VAC 5-80-850, 9 VAC 5-50-260 and 9 VAC 5-80-1180)

3. **Emission Controls** - Volatile organic compound (VOC) emissions from the stored solvent tanks (T1 & T2) shall be controlled by the use of a variable vapor space tank.
(9 VAC 5-80-850, 9 VAC 5-80-1180 and 5-50-260)

4. **Emission Controls** - Particulate emissions from the laser and electrostatic perforators (LP & EP1) shall be controlled by a wet scrubber. The laser and electrostatic perforators shall be provided with adequate access for inspection.
(9 VAC 5-80-850)

5. **Emission Controls** - Particulate emissions from the paper trimming collection system (BG) shall be controlled by a baghouse. The baghouse shall be provided with adequate access for inspection.
(9 VAC 5-80-850)

6. **Control Parameters and Monitoring Devices** - Each of the thermal oxidizers shall maintain a minimum combustion zone temperature of 1400°F and a residence time of 1 second. The thermal oxidizer shall be equipped with a device to continuously measure and record the temperature of the combustion zone (oxidizer chamber temperature). Each monitoring device shall be maintained, calibrated and operated in accordance with approved procedures; which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the regenerative thermal oxidizer is operating. (9 VAC 5-80-850 and 9 VAC 5-80-1180)

7. **Total Enclosure** - The total enclosure shall meet the following criteria:

    a. Any natural draft openings shall be at least 4 equivalent opening diameters from each VOC emitting point;

    b. The total area of all natural draft openings shall not exceed 5 percent of the surface area of the enclosure's four walls, floor and ceiling;

    c. The average facial velocity of air through the natural draft openings shall be at least 200 feet per minute and the direction of flow shall be into the enclosure.

    d. All access doors and windows shall be closed during routine operation of the presses.

    (9 VAC 5-80-850 and 9 VAC 5-80-1180)

8. **Monitoring** – Monitoring of the average facial velocity of a minimum of 200 ft/min which corresponds to a pressure drop of 0.013 mm of Hg or 0.007 in. of H_2O as required for a permanent total enclosure designation shall be demonstrated by a differential pressure meter across the enclosure (the entire building is the permanent total enclosure). The differential pressure meter records shall be recorded and reviewed once per shift. In addition, verification of direction of air flow is inward shall be verified by a negative pressure which shall be recorded once per shift.
(9 VAC 5-80-850)

9. **Monitoring** – Roslyn Converters, Inc. may determine the volatile organic compound (VOC) content of materials based on formulation data, and may rely on volatile organic compound (VOC) content data provided by material suppliers. In the event of any inconsistency between the formulation data and the results of Test Methods 24 or 24A of 40 CFR part 60, appendix A, the applicable test method shall govern, unless after consultation, Roslyn Converters, Inc. can demonstrate to the satisfaction of the Department that the formulation data is correct.
(9 VAC 5-80-850 and 9 VAC 5-80-1180)

10. **Monitoring** – Roslyn Converters, Inc. may determine the HAP content of each raw material present in the formulation by Method 311 of appendix A of 40 CFR part 63, or by an alternate method approved by the Department, or by reliance on a certified product data sheet (CPDS) from a raw material supplier. Each CPDS shall include all HAP present at a level greater than 0.1 percent in any raw material used, weighted by the mass fraction of each raw material used in the material. In the event that the Method 311 (of appendix A of 40

CFR part 63) test data is found to be higher than formulation data, the Method 311 test data shall govern, unless an owner or operator demonstrates to the satisfaction of the Department that the formulation data is correct.
(9 VAC 5-80-850 and 9 VAC 5-80-1180)

11. **Certified Product Data Sheet (CPDS)** – Certified Product Data Sheet (CPDS) shall be defined as the following:
Documentation furnished by suppliers of inks, coatings, varnishes, adhesives, primers, solvents, and other materials or by an outside laboratory that provides the organic HAP content of these materials, by weight, measured using Method 311 of appendix A of 40 CFR Part 63 or an equivalent or alternative method (or formulation data as provided in 40 CFR 63.827(b)) and the solids content of these materials, by weight, determined in accordance with 40 CFR 63.827(c).
(9 VAC 5-80-1180)

OPERATING/EMISSION LIMITATIONS

12. **Throughput** - The throughput of VOC to the eight (8) station press (P10) shall not exceed 545.1 pounds per hour and 1,195.01 tons per year, calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-850)

13. **Throughput** - The throughput of VOC to the two (2) station press (P9) shall not exceed 490.7 pounds per hour and 848.25 tons per year calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-850)

14. **Throughput** - The throughput of VOC to the six (6) station press (P11) shall not exceed 561.6 pounds per hour and 1,276.08 tons per year calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-850)

15. **Throughput** - The throughput of VOC to the press parts washer (PW1) (includes cleanup) shall not exceed 141.0 pounds per hour and 100 tons per year, calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-850 and 9 VAC 5-80-1180)

16. **Throughput** - The throughput of VOC to each variable space solvent tanks (T1 & T2) shall not exceed 264,000 gallons per year of solvent for a combined total of 528,000 gallons per year, calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-850)

17. **Fuel** - The approved fuel for the RTO burners, Fulton Fluid Heaters (H1 & H2) and Modine Space Heaters (HC1—24) is natural gas. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-850)

18. **Fuel Consumption** – The facility (which includes Fulton Fluid Heaters (H1 & H2), Modine Space Heaters (HC1-24), and the RTO burners) shall consume no more than 58.0×10^6 cubic feet of natural gas per year (combined), calculated monthly as the sum of each consecutive 12 month period.
(9 VAC 5-80-850)

19. **Fuel** - The natural gas shall meet the specifications below:

NATURAL GAS:

Minimum heat content:	1,000 Btu/cf HHV.

(9 VAC 5-80-850)

20. **Emission Limits** - Emissions from the operation of the parts washer (PW1) shall not exceed the limits specified below:

Volatile Organic Compounds	3.0 lbs/hr	2.1 tons/yr

(9 VAC 5-80-850)

21. **Emission Limits** - Emissions from the operation of the eight (8) station press (P10) shall not exceed the limits specified below:

Volatile Organic Compounds	11.5 lbs/hr 5.99 lbs/gal coatings as applied	25.1 tons/yr

(9 VAC 5-80-850)

22. **Emission Limits** - Emissions from the operation of the two (2) station press (P9) shall not exceed the limits specified below:

Volatile Organic Compounds	10.3 lbs/hr 5.22 lbs/gal coatings as applied	17.8 tons/yr

(9 VAC 5-80-850)

23. **Emission Limits** - Emissions from the operation of the six (6) station press (P11) shall not exceed the limits specified below:

Volatile Organic Compounds	11.8 lbs/hr 6.24 lbs/gal coatings as applied	26.8 tons/yr

(9 VAC 5-80-850)

24. **Plantwide Emission Limits** - Total emissions from the facility shall not exceed the limits specified below:

Particulate Matter	0.4 lbs/hr	0.6 tons/yr
PM-10	0.4 lbs/hr	0.6 tons/yr
Nitrogen Oxides (as NO_2)	6.6 lbs/hr	2.9 tons/yr
Carbon Monoxide	5.5 lbs/hr	2.4 tons/yr
Volatile Organic Compounds	166.2 lbs/hr	72.6 tons/yr

(9 VAC 5-80-850)

25. **Emission Limits** - Hazardous air pollutant (HAP) emissions, as defined by §112(b) of the Clean Air Act, from the facility shall not exceed 9.9 tons per year of any individual HAP or 24.9 tons per year of any combination, calculated monthly as the sum of each consecutive 12 month period. HAPs which are not accompanied by a specific CAS number [as listed in Attachment A] shall be calculated as the sum of all compounds containing the named chemical when determining compliance with the individual HAP emissions limitation of 9.9 tons per year.
(9 VAC 5-80-850, 9 VAC 5-170-160 and 9 VAC 5-60-100)

26. **Visible Emission Limit** - Visible emissions from the regenerative thermal oxidizer (RTO) shall not exceed 5 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-80-850, 9 VAC 5-50-260, 9 VAC 5-50-80 and 9 VAC 5-50-20)

27. **Visible Emission Limit** - Visible emissions from the laser perforator (LP) and the paper trimming collection system (BG) shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-80-850)

28. **Emissions Venting** – The permittee shall vent emissions from the paper trimming collection system (BG) inside the facility.
(9 VAC 5-80-850)

RECORDS

29. **On Site Records** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Region. These records shall include, but are not limited to:

a. Annual hours of operation of each of the laser and electrostatic perforators (LP and EP1), calculated monthly as the sum of each consecutive 12 month period.

b. Annual hours of operation of the paper trimming collection system (BG), calculated monthly as the sum of each consecutive 12 month period.

c. Annual consumption of natural gas by the facility, calculated monthly as the sum of each consecutive 12 month period.

d. Annual throughput of VOCs to the eight (8) station press (P10), calculated monthly as the sum of each consecutive 12 month period.

e. Annual throughput of VOCs to the two (2) station press (P9), calculated monthly as the sum of each consecutive 12 month period.

f. Annual throughput of VOCs to the six (6) station press (P11), calculated monthly as the sum of each consecutive 12 month period.

g. Annual throughput of VOC to the storage tanks (T1 & 2) and the parts washer (PW1), calculated monthly as the sum of each consecutive 12 month period.

h. Monthly and annual emissions to verify compliance with the individual and total [toxic compound or HAP] emission limitations in Condition 25. Annual emissions shall be calculated monthly as the sum of each consecutive 12 month period.

i. Records shall be kept demonstrating the VOC content and HAP content of each coating material and solvents used in the facility. Acceptable records to demonstrate VOC and HAP content shall be as described in conditions 9, 10, 11 and/or 30.

j. Operation and control device monitoring records for the regenerative thermal oxidizers.

k. Monitoring records of the differential pressure meter.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
(9 VAC 5-80-900 and 9 VAC 5-50-50)

30. **Testing** – The facility shall test at any time using appropriate EPA Test Methods at the request of the Department of Environmental Quality, to determine if the coatings and solvent used at the facility meet the VOC and HAP limitations.
(9 VAC 5-80-850 and 9 VAC 5-80-1180)

31. **Testing** – A performance test shall be conducted for VOC from the regenerative thermal oxidizer stack to determine compliance with the emission limits, and control efficiency requirements contained in Conditions 20, 21, 22, 23, 2 and 7. The tests shall be performed, and reported and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after issuance of this permit. Tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30, and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. The details of the tests are to be arranged with

the Piedmont Region. The permittee shall submit a test protocol at least 30 days prior to testing. One copy of the test results shall be submitted to the Piedmont Region within 180 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-80-850 and 9 VAC 5-80-880)

32. **Emission Testing** - The printing facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided.
(9 VAC 5-80-850 and 9 VAC 5-80-880)

GENERAL CONDITIONS

33. **Right of Entry** - The permittee shall allow authorized local, state, and federal representatives, upon the presentation of credentials:

    a. To enter upon the permittee's premises on which the facility is located or in which any records are required to be kept under the terms and conditions of this permit;

    b. To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit or the State Air Pollution Control Board Regulations;

    c. To inspect at reasonable times any facility, equipment, or process subject to the terms and conditions of this permit or the State Air Pollution Control Board Regulations; and

    d. To sample or test at reasonable times.

    For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency.
    (9 VAC 5-170-130 and 9 VAC 5-80-850)

34. **Notification for Facility or Control Equipment Malfunction** - The permittee shall furnish notification to the Piedmont Region of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by facsimile transmission, telephone, or telegraph. Such notification shall be made as soon as practicable but no later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within two weeks of discovery of the malfunction. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Piedmont Region in writing.
(9 VAC 5-20-180 C and 9 VAC 5-80-850)

35. **Violation of Ambient Air Quality Standard** - The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.
(9 VAC 5-20-180 I and 9 VAC 5-80-850)

36. **Maintenance/Operating Procedures** – The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:

    a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.

    b. Maintain an inventory of spare parts.

    c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.

    d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

    Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request.
    (9 VAC 5-50-20 E and 9 VAC 5-80-850)

37. **Permit Suspension/Revocation** - This permit may be revoked if the permittee:

    a. Knowingly makes material misstatements in the permit application or any amendments to it;

    b. Fails to comply with the terms or conditions of this permit;

    c. Fails to comply with any emission standards applicable to a permitted emissions unit;

    d. Causes emissions from this facility which result in violations of, or interferes with the attainment and maintenance of, any ambient air quality standard;

    e. Fails to operate this facility in conformance with any applicable control strategy, including any emission standards or emission limitations, in the State Implementation Plan in effect at the time that an application for this permit is submitted;

    f. Fails to comply with the applicable provisions of Articles 6, 8 and 9 of 9 VAC 5 Chapter 80.

    (9 VAC 5-80-1010)

38. **Change of Ownership** - In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current permit issued to the previous owner. The new owner shall notify the Piedmont Region of the change of ownership within 30 days of the transfer.
    (9 VAC 5-80-940)

39. **Permit Copy** - The permittee shall keep a copy of this permit on the premises of the facility to which it applies.
    (9 VAC 5-80-860 D)

SOURCE TESTING REPORT FORMAT

Report Cover

1. Plant name and location
2. Units tested at source (indicate Ref. No. used by source in permit or registration)
3. Test Dates.
4. Tester; name, address and report date

Certification

1. Signed by team leader/certified observer (include certification date)
2. Signed by responsible company official
3. *Signed by reviewer

Copy of approved test protocol

Summary

1. Reason for testing
2. Test dates
3. Identification of unit tested & the maximum rated capacity
4. *For each emission unit, a table showing:
    a. Operating rate
    b. Test Methods
    c. Pollutants tested
    d. Test results for each run and the run average
    e. Pollutant standard or limit
5. Summarized process and control equipment data for each run and the average, as required by the test protocol
6. A statement that test was conducted in accordance with the test protocol or identification & discussion of deviations, including the likely impact on results
7. Any other important information

Source Operation

1. Description of process and control devices
2. Process and control equipment flow diagram
3. Sampling port location and dimensioned cross section Attached protocol includes: sketch of stack (elevation view) showing sampling port locations, upstream and downstream flow disturbances and their distances from ports; and a sketch of stack (plan view) showing sampling ports, ducts entering the stack and stack diameter or dimensions

Test Results

1. Detailed test results for each run
2. *Sample calculations
3. *Description of collected samples, to include audits when applicable

Appendix

1. *Raw production data
2. *Raw field data
3. *Laboratory reports
4. *Chain of custody records for lab samples
5. *Calibration procedures and results
6. Project participants and titles
7. Observers' names (industry and agency)
8. Related correspondence
9. Standard procedures

* Not applicable to visible emission evaluations